



# Shellfish Rehabilitation and Lease Programs

Joint Legislative Oversight Committee on Agriculture and Natural and  
Economic Resources

March 13, 2018

*Department of Environmental Quality  
Division of Marine Fisheries*



# *Division of Marine Fisheries*

## *Shellfish Activities*

- Oyster Sanctuaries
- Oyster Reef Cultch Planting
- Shellfish Leases and Aquaculture



# *Division of Marine Fisheries*

## *Oyster Sanctuary Program*

**Oyster Sanctuary Program constructs no-take oyster reefs to provide seed for surrounding natural oyster rocks and cultch-planted sites. Also creates important habitats for fish and invertebrate species.**

**FY17-18 funds = \$1.4 million (\$500,000 NR)**

- +\$36,000 from the Coastal Recreational Fishing License Program

### **Current Activities: Swan Island Oyster Sanctuary**

- Construction of 40-acre site
- Partnering with the N.C. Coastal Federation to leverage grant funding received from National Oceanic and Atmospheric Administration
- Total expenditure will be approximately \$3.2 million





# *Division of Marine Fisheries Oyster Sanctuary Program*

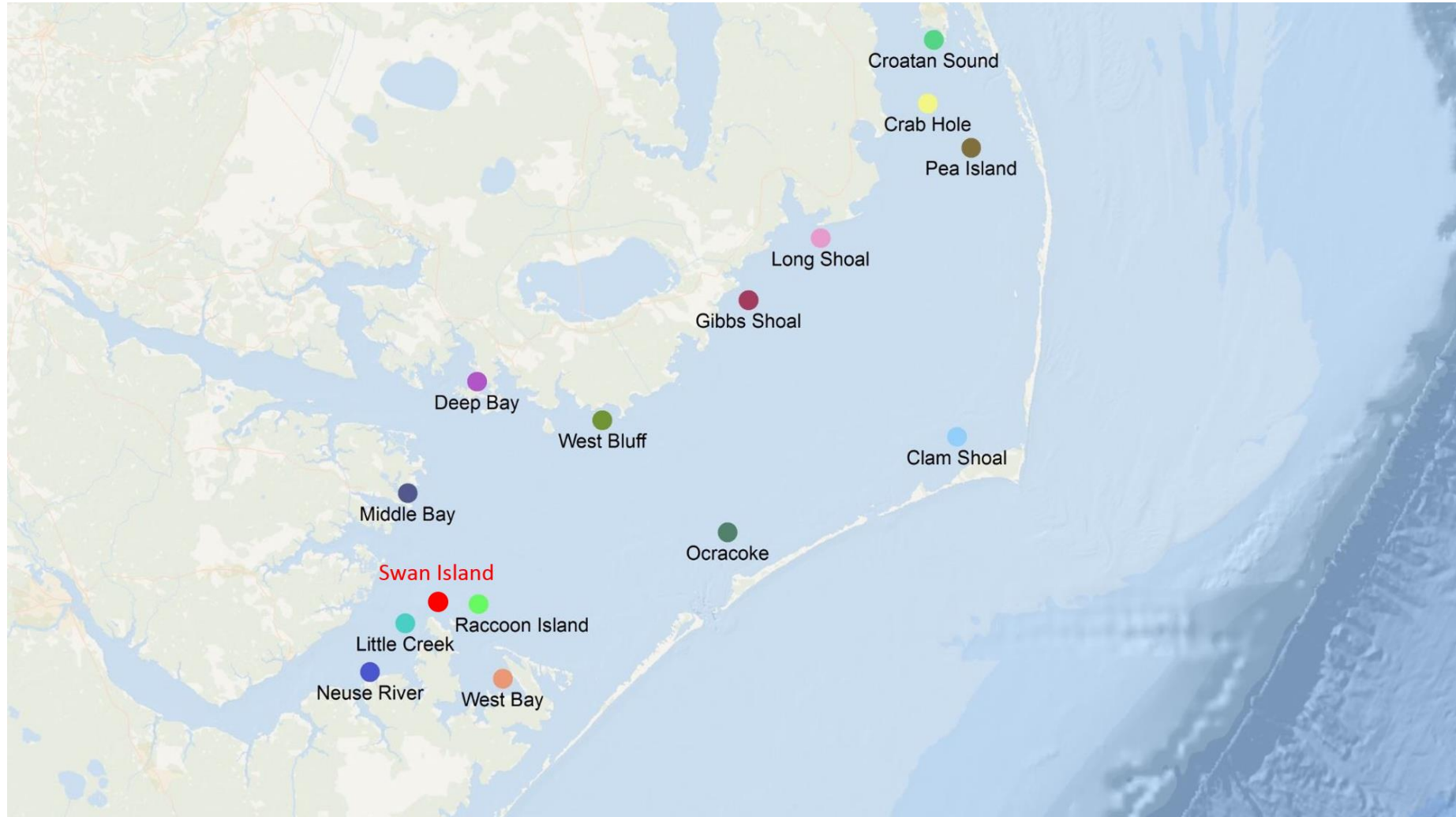
## **Swan Island Oyster Sanctuary Scale and Comparison**



# *Division of Marine Fisheries*

## *Oyster Sanctuary Program*

### **Jean Preston Sanctuary Network**





# *Division of Marine Fisheries*

## *Oyster Reef Cultch Planting*

**The division deploys suitable hard substrate to allow oyster larvae to settle and form new reefs. With good settlement and water quality, oysters typically reach harvest size in three years.**

- **FY17-18 Funds = \$1.1 million**
- **Current Activities**
  - Expect to purchase 73,673 bushels of shell, estimated cost \$181,755
  - Under contract for purchase and delivery of 406,125 bushels of limestone marl, contract price \$709,587



Cultch planted  
in 2013 with  
oyster  
attached  
in 2016



# *Division of Marine Fisheries*

## *Oyster Reef Cultch Planting*

### Future Activities

- 2018 deployment estimated at 382,253 bushels of material; efforts hampered due to loss of primary deployment vessel.
- Additional limestone marl stockpiled for 2019 and 2020 deployments, intended to buffer costs for construction of a primary deployment vessel.

### Concerns

- Division's primary deployment vessel **West Bay** surplused due to structural integrity issues.
- Loss of the **West Bay**, the main deployment vessel for cultch planting, sanctuary work and artificial reefs, will result in lower volumes of deployment.
- Would like to replace **West Bay** with more efficient, easier to maintain purpose-built vessel. Design, bid and construction may take multiple years, so funding should remain with the project until complete.



# *Division of Marine Fisheries*

## *Shellfish Leases and Aquaculture*

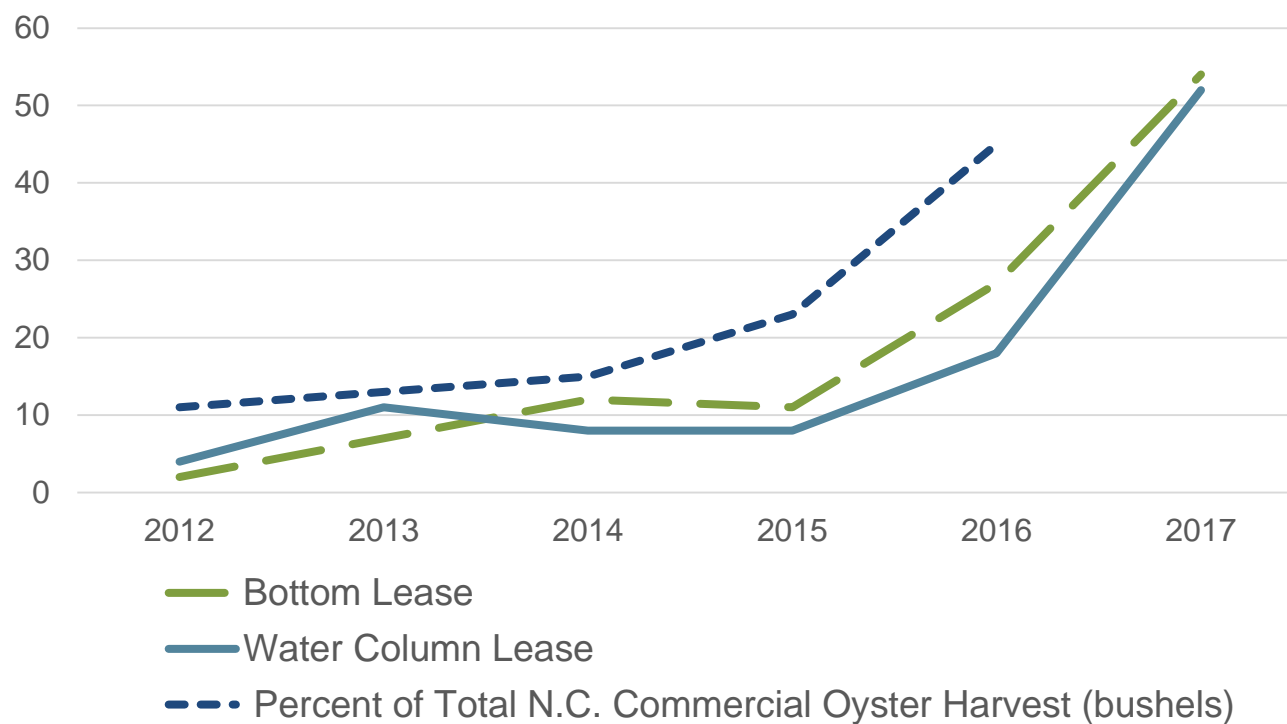
- Since 1858, private use of public trust waters allowed for production of shellfish by leasing to North Carolina residents.
- Traditionally used for bottom only, for clams and oysters.
- In 1989, legislation enacted to allow use of water column above existing shellfish leases.
- First water column lease issued in 1991.
- In 2015, legislation enacted allowing cages up to 18 inches off of a bottom lease.
- Recent escalation in number of lease applications and conflicts.





# *Increasing Interest and Production*

## Bottom & Water Column Lease Applications



# Leases and Franchises

## Shellfish Lease (Bottom and Water Column)

- Over public trust waters
- Cannot be on productive bottom
- Rent charged
- Can be terminated

## Franchise (Bottom and Water Column)

- Over recognized submerged land claim
- Can be on productive bottom
- Concentrated in Onslow and Pamlico counties
- No rent for bottom lease
- Can be terminated



Type	Number	Acreage
Franchise	51	520
Bottom Lease	183	1,164
Bottom Lease with Water Column	41	129
Totals December 2016	275	1,813
Estimated Totals December 2017	320	1,910



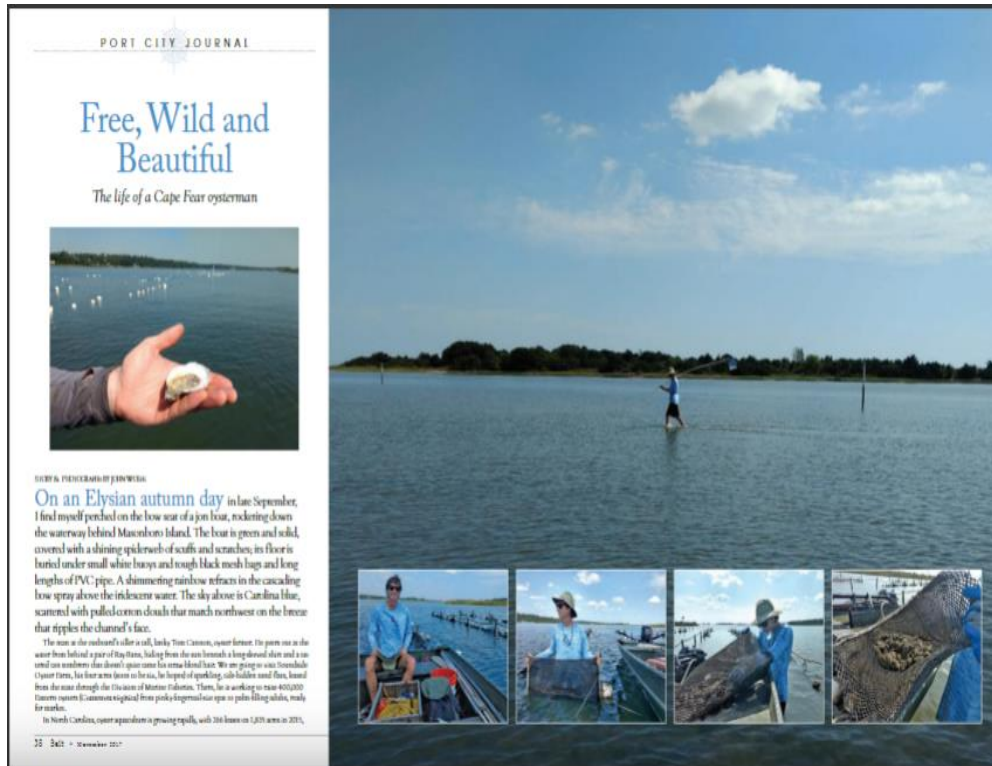
# *Shellfish Lease Challenges*

- Lease siting and conflicting uses
- Potential for increasing litigation expenses
- Navigation hazards over bottom gear/cages
- Experience level of applicants varies
- Gear cleanup/abandonment
- Seed/nursery availability
- Theft





# Salt Magazine, November 2017



## A Message From Masonboro Sound

A public hearing will be held on Thursday, January 4, 2018 at 6:00 PM at the NC Division of Environmental Quality, Division of Marine Fisheries, 127 Cardinal Drive Ext., Wilmington, NC 28405.

**Masonboro Sound Before Oyster Farming in 2016**



Masonboro Sound After Oyster Farming



The NC Fishery Department leased many acres of submerged marshland in Masonboro Sound to individuals for commercial oyster farming last year without the consent or permission of the owners of the marshland and the adjacent neighbors. This has resulted in the construction of metal grids, cages and baskets in the sound, which has significantly interfered with fishing, canoeing, water skiing and boating, as well as clamming and shrimping. This also has interfered with the natural habitat for pelicans, osprey and winter migrating ducks.

They are in the process of leasing more acres for commercial oyster farming this year.

We believe that this activity will harm the bird habitat as well as recreational water activities.

This will also have a negative effect on the value of adjacent real estate.

We therefore cordially request Governor Cooper and the County Commissioners to stop this harmful activity.

All public are invited to attend.

**Wilmington Star News paid  
advertisement, Dec. 27, 2017**

## *Potential Solutions*

- Restrict siting of new shellfish leases within 500 yards (or other safe distance) of duck blinds existing at time of lease investigation.
- Conduct spatial planning analysis for shellfish lease siting in public trust waters; use results to improve lease siting process and possibly create predesignated shellfish lease enterprise areas.
- Place into law or rule requirements for evaluating cumulative impacts of multiple leases in a given area when considering new shellfish leases.
- Require minimum clearance at mean low water over aquaculture gear for bottom leases that do not have a water column amendment.



## *Potential Solutions*

- Develop rules for training that address eligibility of new and transfer applicants.
- Require performance bond or proof of insurance to address liability to the public and for derelict gear from and on a lease.
- Modify statutes to allow nursery of shellfish seed in closed areas on case-by-case basis.
- Increase fines for theft and damage to shellfish aquaculture leases.





## *Marine Fisheries Commission Action*

At its February 2018 business meeting, commission voted to:

Temporarily stop issuing shellfish leases and accepting shellfish lease applications from Bogue Sound south until the division can fully assess the safety concerns and other regulatory needs and report back to the commission at its May 2018 meeting.

The Division of Marine Fisheries is seeking guidance on its authority to take this action.





*Questions?*